STRATEGY RESEARCH PROJECT

MOVEMENT CONTROL

BY

LIEUTENANT COLONEL MICHAEL J. LALLY
United States Army

USAWC CLASS OF 1999

U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050

USAWC STRATEGY RESEARCH PROJECT

MOVEMENT CONTROL

by

LIEUTENANT COLONEL MICHAEL J. LALLY
United States Army

Professor Thomas W. Sweeney, COL (R)
Project Advisor

U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013

ABSTRACT

AUTHOR: Michael J. Lally (LTC) USA

TITLE: Movement Control

FORMAT: Strategy Research Project

DATE: 7 April 1999 PAGES: 43 CLASSIFICATION: Unclassified

Movement control is the critical function that seamlessly links a successful power projection strategy with an integrated theater transportation system. This paper examines U.S. Army movement control organizations and makes recommendations on the most effective way to organize and employ movement control to support the Army Component Commander and Joint Force Commander.

Army and Joint doctrines, concepts and goals for Joint Vision 2010 and beyond, and the developing Distribution Management Center and Theater Support Command are examined. Analysis shows that movement control units are indispensable to the operational missions of RSOI and theater distribution. Additionally, the units must continue to leverage new technology and developing information systems to make timely decisions and to provide quality recommendations. A recommendation is made to develop a single transportation command to support the concepts of Joint Vision 2010 and to support the Army Component Commander and the Joint Force Commander.

TABLE OF CONTENTS

"Deployment Woes Muddling through in Bosnia", an U.S. News & World Report article, describes confusion and bottlenecks on movements to Bosnia. When a train with Bradley fighting vehicles belonging to the 1st Cavalry Squadron - the first combat unit to cross the Sava River into Bosnia - pulled into Croatia in December 1995 there was no one to meet it. The advance team on the ground could not find the train of Bradley fighting vehicles, and took several hours to determine at which railhead the unit train was. The confusion was a result of poor coordination with host nation rail authorities and lack of communications between the advance party and personnel on the train. Furthermore, poor scheduling by Army personnel and international rail authorities left trains loaded with unit equipment stationary for days at railheads throughout Hungary and Croatia.[1] Additionally, over 100 containers, deploying by highway and rail, arrived in Croatia with no place to stage and insufficient container handling equipment to offload them.

An effective transportation and movement control system to synchronize rail and highway movements, to provide visibility of movements, and to coordinate reception and off loading operations had not been established in the new theater of operations. Lack of positive control and insufficient communications created confusion on both rail and highway movements. Glitches and problems during deployments are not

new, but Haiti, Somalia, and Bosnia suggest a pattern of failing to learn from past mistakes.[2] Moreover, Bosnia reconfirmed that a well-defined, integrated transportation system is essential to successful tactical operations. When the system is poorly designed, the Army pays the price.

The three elements of a transportation system are mode operations, terminal operations, and movement control. Joint and Army doctrine agree that "movement control is the most critical component of the system."[3] It coordinates and synchronizes transportation assets, provides a seamless interface between strategic and tactical systems, and provides intransit visibility. This paper will examine U.S. Army movement control organizations and make recommendations on the most effective way to organize and employ movement control to support the Army Component Commander and Joint Force Commander.

Current Structure and Doctrine.

The United States Army Transportation School and the new FM 55-10, *Movement Control in a Theater of Operations*, define movement control as follows:

> Movement Control is the planning, routing, allocating, validating, coordinating, priority management and in-transit visibility of personnel, units, equipment, and supplies moving over the lines of communication, and the commitment of apportioned transportation assets according to command planning directives. It is a continuum that involves synchronizing and integrating

> logistics, movement information, and programs that span the strategic, operational, and tactical levels of war. Movement control is guided by a system that balances requirements against capabilities and assigns resources based on the combat commander's priorities.[4]

In a theater of operations, there are various sized movement control teams. Within a Corps, a movement control center commands and controls movement control teams. At echelons above corps, command and control is provided by movement control battalions and movement control agencies, a brigade command.

There are four types of movement control teams. They coordinate with the customer units and mode operators, receive movement requirements, match transportation assets with the requirements, task the mode operator, report the movements to appropriate headquarters, and provide intransit visibility. Port movement control teams, located at air and sea ports, coordinate the movements of units, equipment, supplies, and personnel into, through, and out of the port. Operating at the critical seam between strategic and operational transportation systems, they are the first step in providing theater intransit visibility.[5] Area movement control teams, located at major transportation and logistics nodes coordinate transportation support for units in, or transiting their area of operations, and provide intransit visibility.[6] Division support teams are attached to a division to augment the division transportation

officer.[7] The fourth type, movement regulating teams, assists in the highway regulation mission. They operate on the main and alternate supply routes to observe, assess, report, and adjust convoy and other movements as required.[8]

The movement control battalion or movement control center commands and controls movement control teams, coordinates movement programming, highway regulation, and transportation support in its geographic area, and provides intransit visibility. Simultaneously working at the strategic, operational, and tactical levels it provides intransit visibility using information management systems and reports from subordinate units. The number and type teams assigned to a battalion is determined by the geographic area and mission requirements. The battalion works closely with the strategic transportation system to provide a seamless interface with the theater's Reception, Staging, Onward Movement and Integration (RSOI) mission, and theater distribution system. It manages tactical moves through its numerous movement control teams located at key logistic nodes in the theater.

The ability to leverage new technology and developing information management systems to make timely decisions and provide quality recommendations is probably the most important capability of movement control units. By using strategic information systems such as the Global Transportation Network,

Global Command and Control System, and Joint Total Asset Visibility, adequate transportation resources are correctly positioned to facilitate the transition of equipment and personnel from strategic to theater control. Subordinate movement control teams located at transportation nodes report "ground truth" and update information systems. Operational and tactical information systems such as Transportation Coordinator's Automated Information for Movement System II (TCAIMS II), Movement Tracking System, and Radio Frequency tags provide "real-time" status of transportation assets, containers, pallets, and trailers. Using information systems and reporting procedures, the movement control unit becomes the single point of contact for reliable transportation information, maintains positive control of movements, and increases confidence in the transportation and distribution systems.

The U.S. Army has movement control units stationed in Europe and Korea that perform their theater movement control mission on a daily basis. The units are augmented with civilians and local nationals that serve as interpreters and provide transportation expertise for host nation rail, barge, truck, containers, and paperwork for accountability, payment, and customs. Stateside units train for contingencies and have varying degrees of expertise in dealing with commercial assets,

host nation transportation issues, and resource management because these skills are not practiced on a regular basis.

The echelon above corps movement control battalion and movement control agency, and corps movement control center are capable of forming the nucleus for a joint or combined movement control center.

Joint doctrine gives the geographic commander several options for performing movement control. Joint Pub 4-01.3, *Joint Tactics, Techniques and Procedures for Movement Control,* states that he may direct subordinate Joint Force Commanders and Service components to perform their own movement control. Secondly, he may establish a theater Joint Transportation Board or a Joint Movement Center, or both. "However, to ensure a fully integrated and responsive transportation system, the combatant commander should consider assigning responsibility for theater transportation movement control to a single joint office, the JMC."[9]

During deployment operations, the Joint Movement Center's major role is to support the RSOI mission and to ensure the timely movement of forces. Using strategic and operational information systems, it becomes the source for all transportation information and an excellent source of information for the J3 force tracking cell. Additionally, it works closely with the J3 and J4 to develop plans, policies and

procedures, for common user transportation assets, highway regulation, and to initiate host nation contracts.

During sustainment operations, it works closely with the logistics community, especially the material management center, to develop a responsive theater distribution system. It continues to provide intransit visibility over all unit, personnel, and supply movements. Additionally, it establishes procedures for requesting, validating, tasking and tracking common user land transportation assets, CH-47 logistic missions, C130 logistic missions, and host nation transportation assets.

The joint movement center size is dependent on the mission, geography, size of force and duration of contingency. It can start out as a J4 staff function providing direction to a handful of movement control teams at key ports of debarkation. Then it can grow into an independent joint movement center with teams spread throughout the theater.

If the requirement is greater than a staff function can provide, movement control should be delegated to a component command under the "dominant user" or "most capable service" concept. Additionally, representatives from USTRANSCOM should be requested to become part of the Joint Movement Center to establish a vital link with the strategic air and sea deployment systems, and the Military Traffic Management Command's port operating units. Representatives from other Services, coalition

partners, and the host nations should round out the organization.

Lastly, the joint movement center should have operational control of all theater movement control teams so that it can synchronize movements. For a joint movement center to be effective and to implement command guidance, it must have directive authority over the subordinate teams. It needs authorization to establish priorities for using transportation assets, to prioritize movements, to regulate highway movements, to establish reporting requirements to monitor the overall transportation system, and to direct actions to resolve problems or bottlenecks. Coordination authority is insufficient and will create inefficiencies within the theater distribution system. Currently, directive authority or operational control is not defined in joint doctrine. In order to establish distribution systems that work in a joint environment, this should be reevaluated.[10]

Relevancy out to 2010 and Beyond.

To support the U.S. National Security Strategy military forces must be prepared to respond to crises across the full spectrum of military operations. This encompasses humanitarian assistance to fighting and winning major theater of wars, and conducting concurrent smaller scale contingency operations.[11]

Moreover, the United States must have a power projection capability that provides national leaders with options in responding to potential crises. As the military looks to the future, it is adapting organizations, doctrine, tactics, and procedures to deploy rapidly and "concentrate U.S. military power in distant corners of the globe".[12]

Joint Vision 2010 prescribes a template to leverage technological opportunities and apply new operational concepts to work within a joint warfighting environment. Dominant Maneuver, Precision Engagement, Full Dimensional Protection, and Focused Logistics are the operational concepts developed for this dynamic environment.[13]

Focused Logistics involves such concepts as information fusion, right sized logistics, agile and flexible infrastructures, Automatic Identification Technology, "Just Enough" logistics, intransit visibility, distribution systems, Joint Deployment, and Joint Theater Logistics Management. The goals for Focused Logistics are to reduce layered stockpiles; to reduce logistics personnel in theater; to provide more effective and responsive support; to provide timely intransit visibility; and to reduce logistics response times.[14] To accomplish these goals logisticians must fully examine and understand the big picture of strategic, joint, and combined operations.[15]

Furthermore, the military must transition from a supply system to a distribution based sustainment system.[16]

From now until 2010, logistics improvements will focus on "automation, communications, and business practices; reshaping command and control relationships to provide better unity of command; and purchasing distribution technologies that facilitate rapid throughput and follow-on sustainment."[17] Additionally, a single combat service support organization at each level of command will capitalize on technologies and information capabilities to provide rapid and effective support.[18]

Beyond 2010, the second wave of the revolution in military logistics will focus on maximizing new technologies to lighten support requirements in fuel, water and ammunition, project supplies forward faster, and reduce the overall demand for logistics. Breakthroughs in propulsion, lightweight armor, power supplies, information distribution, and other disciplines will feed this wave.[19]

Reception, Staging, Onward Movement, and Integration is an operational mission critical to a successful power projection military. Larger and faster strategic transportation assets, improved deployment facilities at stateside installations, and prepositioned equipment and supplies result in quicker deployments. However, RSOI is the essential link required to

transition arriving personnel, equipment, and supplies into concentrated, combat ready forces. Moreover, movement control is the function that synchronizes all the transportation operations that support RSOI in accordance with command priorities. Movement control units must seamlessly link the strategic, operational and tactical transportation systems to maximize the effectiveness of limited theater transportation assets; to eliminate confusion, bottlenecks, and friction in the system; and to provide timely information.

To meet Joint Vision 2010 goals, the U.S. Army Combined Arms Support Command (CASCOM) is developing a new organization called the Theater Support Command. It is flexible and modular, so that it can right size the logistics footprint for a given contingency and provide seamless linkage to the strategic logistics systems. It is designed to support the echelons above corps forces in an Army Component Command and can form the nucleus for a Joint or Combined Logistics Command. It executes much of the RSOI mission and synchronizes the theater distribution system.[20]

Theater distribution is central to the Theater Support Command mission and is defined as "a comprehensive in-theater distribution system for deployment, sustainment, and redeployment of units, personnel, materiel, and equipment that is seamlessly integrated with the strategic logistics system".[21]

Theater distribution is dependent on effective utilization of limited transportation assets. As in RSOI, movement control is the essential function that synchronizes transportation operations.

Looking out to 2010 and beyond, a Joint Task Force must be flexible enough to function as a Combined or Multinational Force. Movement control, an integral part of Multinational Logistics, must be carefully planned to ensure success. Using interpreters and liaison officers, many of the command and control, tracking, coordinating, planning, and tasking issues can be overcome. The difficult issues are sharing the new information management technology and financial reimbursement for services provided. Both of these are tough issues for the entire logistics system and must be overcome.

Options.

The U.S. Army is considering three options for movement control organizations to support a power projection force and prepare for the future.

1. Maintain the current structures and doctrine as described earlier.

2. Form a Distribution Management Center. It is a multifunctional organization within the Support Operations staff of a Logistics Command that will be the single point of

management integration and synchronization of distribution. It will have staff supervision and tasking authority over the material management center, the movement control center, and functional directorates.[22]

3. Form a transportation headquarters that combines mode operations, movement control, and terminal operations into a single organization.[23]

Option 1 - Current Structure.

The current structure was described earlier in the paper. Recently approved MTOE changes addressed organizational difficulties within the movement control center and movement control battalion.[24] The evaluation of this option is based on the improved organizations.

Pro:

Organizations and doctrine currently exist in Army active, reserve and National Guard structures. Furthermore, the Total Army Analysis in 1996 increased the number of movement control teams in the active and reserve structure.[25] This increase improved the Army's force projection capability, enhanced the ability to coordinate and provide positive control over movements, and increased intransit visibility capabilities.

The current organizations support rapid force projection. They are designed for a building block approach to force tailoring and support the agile logistics infrastructures envisioned for the future. The organizations are small, flexible, and easy to deploy and employ in the theater of operations.

The battalion and agency level movement control units are well suited to form the nucleus for a Combined/Joint Movement Control Center. The Army units provide intransit visibility, highway regulation, movement programming, and command and control of teams employed at critical theater logistics nodes. Once augmented by the other Services, an USTRANSCOM element, contracting, and resource management capabilities, the Joint Movement Center seamlessly integrates strategic, operational and tactical movements for the Joint Force Commander.

Movement control organizations support information fusion concepts with the ability to access and integrate transportation information, and provide timely and accurate visibility. Existing and future information systems, combined with movement control teams located at critical theater logistics nodes, provide responsive support, and the capability to quickly identify and resolve problems. Furthermore, movement control units consider command guidance and all transportation modes when matching a requirement with a transportation asset. This

enables them to optimize the use of the host nation, contracted, and military assets.

Con:

Multiple transportation points of contact in theater (terminal operators, mode operators, and movement control) are confusing. Oftentimes, there is no focal point for transportation issues until a senior transportation officer deploys as part of the staff. Furthermore, if the various transportation commanders do not get along on a personal or professional level, there is no unity of effort because of no unity of command. Friction between transportation leadership often makes it difficult for the respective staffs to resolve issues to improve theater transportation.

Movement control units often lack experience and expertise to work at the operational and strategic levels. Although both joint doctrine and Army doctrine indicate movement control is the most critical transportation function, movement control has not been viewed as career enhancing. Therefore, multiple assignments to develop experienced movement control leaders are not encouraged.[26] Synchronizing deployment and redeployment of forces, establishing RSOI, and developing an integrated theater distribution system requires experience, and a good

understanding of the strategic and operational logistics systems.

Movement control units have insufficient communication capability to accomplish their mission in an undeveloped theater of operations. Units are dependent on landlines, several cellular telephones, and FM radios with limited capability. With the multitude of new information systems, it is essential that units communicate and share information over long distances to be an effective combat force multiplier. Insufficient communication capability is true for all options and needs to be fixed.[27]

Option 2 - Distribution Management Center.

The U.S. Army Combined Arms Support Command (CASCOM) is designing a Distribution Management Center (DMC) to be the cornerstone of successful theater distribution in support of Joint Vision 2010 and Focused Logistics. Joint Pub 1-02 defines a distribution system as follows:

> That complex of facilities, installations, methods, and procedures designed to receive, store, maintain, distribute, and control the flow of military materiel between the point of receipt into the military system and the point of issue to using activities and units.[28]

At the operational level, it is the process of synchronizing all elements of the logistics system to deliver the right thing to the right place at the right time to support the commander. A

distribution system is built on physical capacity, control, and visibility.[29]

The proposed Distribution Management Center is a multifunctional organization within the Support Operations staff that will be the single point of management integration and synchronization of distribution. It will have staff supervision and tasking authority over the material management center, the movement control center, and functional directorates. The Distribution Management Center in conjunction with the Support Operations staff implements the Commander's guidance and allocates resources in accordance with command priorities. The center will be the information fusion center that maintains the command's visibility of the distribution system, synchronizing requirements with available resources to ensure timely delivery of personnel, equipment and supplies.[30]

The distribution management center is part of the early entry module. It must quickly link the strategic and theater logistic systems, provide support to the Reception, Staging, and Onward movement mission, and develop the theater distribution plan.[31]

The distribution management center at theater level will be part of the newly designed Theater Support Command, Support Operations Staff. At the Corps level, it will be part of the COSCOM, Support Operations Staff.[32]

Pro:

The Distribution Management Center centralizes control and visibility of the distribution system. It provides unity of effort to optimize the overall distribution system especially during sustainment operations.[33] As part of a combined or joint command, it can form the nucleus of a combined or joint distribution management center.

The Distribution Management Center's ability to access and integrate logistics information, and to provide timely and accurate visibility of the distribution system will be a positive indicator that the logistics pipeline is responsive. Taking advantage of automated information technologies, information systems, automation tools, and command and control structures the Distribution Management Center can monitor the entire distribution system for trends and performance, identify problems as they develop, and direct actions to resolve problems.

Con:

The Distribution Management Center is designed as a logistics staff element and cannot be easily turned into an independent joint organization. If logistics is a Service responsibility and the Joint Force Commander wants to establish a Joint Movement Center, he must create an adhoc organization of

augmentees to integrate the transportation system. The Army, normally the dominant user, would no longer have a movement control unit capable of forming the nucleus for a joint or combined movement control center. An adhoc unit with little experience, no standard procedures and techniques, would go through a steep learning curve during critical port opening and RSOI operations. Furthermore, pulling the movement control capability out of the Army distribution management center is not a good option because it creates a hole within the Army logistics command.

The Distribution Management Center is geared toward large, established, steady state sustainment operations. In the future, the military must be prepared to respond to crises across the full spectrum of military operations. Many smaller scale contingencies and humanitarian assistance operations will not require a material management center and will rely on split based logistics operations with a small deployed element. Movement control and other transportation units must still deploy to synchronize and support RSOI operations, to establish and operate the theater transportation system, to perform highway regulation, and to conduct redeployment. An organization to handle all sizes and types of contingencies must be developed.

Movement control is separated from transportation mode operations. Therefore, there is no single transportation point of contact and no unity of effort. Power projection, RSOI and theater distribution require timely and effective transportation support.

Developing and training well rounded experienced transportation officers and NCOs will be difficult. Similar to the current movement control structure, assignment to a movement control organization under a distribution management center will not be viewed as career enhancing.

The Commander of the movement control unit works for a staff rather than an operational command. Green tab guidance and requests for prioritization become filtered. This reduces the responsiveness and effectiveness of the movement control system, thereby, reducing the confidence in the distribution system. Movement control operations embedded inside a logistic staff are cumbersome.

Option 3 - Single Transportation Headquarters.

Another option to satisfy Joint Vision 2010 and Focused Logistics requirements is consolidating the three transportation functions, movement control, terminal operations, and mode operations, into a single organization. It streamlines the transportation process, takes advantage of technology and

information systems, and creates a single point of contact for transportation.

A new transportation battalion must be created that combines movement control with the mode operators. Essentially, it is the current truck battalion with a larger S3 section. The new S3 section includes the Operations, Plans, and Highway Regulation sections from the Movement Control Center, and some terminal operations expertise. The battalion will command and control truck companies, cargo transfer companies, and movement control teams.[34] The span of control for movement control teams and geographic area will be less than a current Movement Control Center/Battalion. Using new information systems, the battalion will have the capability to interface with strategic transportation systems. This battalion will be capable of providing transportation support for a small scale contingency or provide initial transportation capability as part of an early entry module.

The Transportation Group and Theater Transportation Command (TRANSCOM) will also have the missions for movement control, mode operations, and terminal operations. The S3 section will be increased to include the Operations, Plans, and Highway Regulation sections from the movement control center.[35] These sections must come with the new information management systems in order to provide a strong intransit visibility and planning

capability. Additionally, sections for resource management and contracting must be added to coordinate and administer transportation contractor support in the theater. The Group and TRANSCOM will be designed for daily operations, future operations, and long range planning. Additionally, they will have the ability to interface with strategic systems, establish liaison teams and work with the host nation. The transportation group or TRANSCOM can form the nucleus for a Joint or Combined organization.

Pro:

All transportation functions under one Commander establishes unity of command, unity of effort, and reduces friction between transportation organizations. Moreover, there is a single transportation point of contact to provide advice and guidance to the Army and Joint Force Commander. This is an improvement because it is not unusual to deploy a terminal unit, truck unit, and movement control unit under separate commands.

This agile and flexible organization can be tailored for any size contingency operation. A single transportation headquarters with its movement control capability will synchronize the operations efforts and logistical support relationships of truck units, cargo transfer companies, and movement control teams that are part of an early entry module,

or port opening capability. As the theater matures and the transportation requirement grows, more units can deploy and augment the structure. Furthermore, unity of effort will be provided because one transportation headquarters is in charge of the operation from start to finish.

A single transportation command enhances the development of transportation officers and NCOs. Combining the organizations into a single command will increase opportunities for personnel to serve in movement control positions and develop a better understanding of this critical mission and the total transportation picture. Trained, experienced transportation officers and NCOs are essential to a power projection military and transportation based distribution system.

U.S. Army positions itself to be a Joint Theater Transportation Command and provide a Joint Movement Center. This transportation command will be the single point of contact to coordinate all theater and host nation inland transportation assets, and provide intransit visibility over theater transportation movements. This falls right in line with the Army's Wartime Executive Agent Responsibility (WEAR) for common user inland transportation; container management; OCONUS port clearance and management; and transportation engineering for highway movements. It is a logical step for the Army to add the

movement control mission and be responsible for all theater transportation functions.

Con:

This organization creates the perception that movement control is not linked with the Material Management Center to provide efficient and effective battlefield distribution. The respective centers may optimize their functional areas at the expense of the theater distribution system.

Movement control organizations tied to mode operators may lose their ability to be an honest broker and provide unbiased transportation advice. The concern is that the host nation, contracted, and other service capabilities may not be effectively utilized because of a dependence or desire to use Army assets.

This structure probably will not work for an U.S. Army Corps that currently has one truck battalion and one movement control center. The mission and geographic span of control for a corps area of operations is too big for a single transportation battalion. A second alternative of splitting movement control between two battalions will not support the corps. A corps requires a single headquarters to coordinate movements, provide highway regulation, and be the central point of contact for intransit visibility.

Assigning a Transportation Group to the COSCOM is a viable option. A group headquarters provides command and control, intransit visibility, highway regulation, transportation support, planning and experience to establish RSOI and theater distribution systems. However, this option increases the size and structure in a COSCOM unit when all current efforts are toward reducing the logistics footprint.

Command and control of the Movement Control Teams must be examined to ensure it is adaptable. Movement Control Team to Battalion to Group or TRANSCOM can be bureaucratic and time consuming. Centralized control and decentralized execution cannot survive with multiple command layers. It is easy to imagine a theater with several transportation battalions where it makes more sense for the movement control teams to report to the Group or TRANSCOM. The battalions will still be needed to provide administrative and logistics support, but operational guidance will come from the Group. Additionally, Group and higher level staffs are better suited for coordinating future operations, long range planning, contractor support, resource management, and interfacing with multiple commands and the host nation.

The decision will come down to what makes the most sense for span of control based on number of movement control teams, geographic area, and mission requirement for responsiveness.

Other factors to consider include determining the command level where critical theater assets such as heavy equipment transports (HETs), Chinooks (CH-47s), and theater airlift should be controlled and tasked.

Analysis and Recommendation.

Movement control, as part of a single transportation command is the most effective way to provide an integrated transportation system that supports the Army Component Commander and the Joint Force Commander in the future. This is especially true at echelons above corps.

A single transportation headquarters streamlines the transportation process, takes advantage of new technology and information systems, and creates a single point of contact for transportation. Unity of command for transportation units benefits the Army Component Commander and Joint Force Commander. Its modular, capability based design enables the organization to incrementally increase its theater capabilities always maintaining continuity of effort. Furthermore, transportation officers and NCOs will learn terminal and mode operations, and the critical movement control function. Training and development of transportation personnel that understand movement control is essential to a power projection force, RSOI, and transportation based distribution system.

The Army has a Wartime Executive Agent Responsibility (WEAR) to provide most theater transportation functions. The Army should take the initiative and provide movement control. A transportation command with movement control provides the full range of transportation support required during deployment, RSOI, theater distribution, and redeployment operations.

A single transportation headquarters will strengthen the Distribution Management Center. At echelons above corps, the transportation group or TRANSCOM plans and operations sections must work closely with the material management center and distribution management center to develop and to execute a theater distribution program, to provide intransit visibility, and to redirect shipments as required. Combining movement control, terminal operators, and transportation mode operators will provide a more responsive transportation system. A responsive transportation system is vital to an efficient and effective distribution system, which is important to all logisticians.

The concern for an honest broker is unwarranted. There are never sufficient inland transportation assets. The movement control center becomes the heart of the transportation operations center and enables the commander to optimize the use of army, contracted, host nation, and other service capabilities. The commander will use all available capabilities

to provide timely and effective transportation support to the Army Component Commander and Joint Force Commander.

However, within a COSCOM, it is difficult to sell the concept of a Transportation Group. Transportation units would be viewed as growing, not reducing the number of personnel. A fourth option is to combine the concepts of a Distribution Management Center and single transportation headquarters, to form a Distribution Management Command.

The Distribution Management Command would be a brigade command. It would have an operations center made up of the Material Management Center, Movement Control Center, and mode operators. Subordinate units would include truck units, cargo transfer units, and movement control teams. This unit will have the control, visibility, and physical capacity to operate the corps distribution system.[36]

This multifunctional organization centralizes control and visibility of the corps distribution system. It establishes unity of command and will optimize the overall distribution system. Its ability to access and integrate logistics information, and provide timely and accurate visibility will be a positive indicator that the distribution system is responsive.

This agile and flexible organization with a heavy reliance on transportation units can be tailored for any size contingency operation. Initially the command will focus on a port opening

capability and RSOI. It will quickly transition to establishing a theater distribution system. The emphasis on transportation units supports the Joint Vision 2010 concept of transitioning from a supply system to a distribution system.

A Distribution Management Command addresses the concerns of the transportation community by streamlining operations, providing a single transportation point contact in the corps, and developing experienced transportation and logistics leaders. Furthermore, it can easily form the nucleus of a Joint or Combined Distribution Management Command.

A logical extension of the corps concept is to form an echelon above corps Distribution Management Command. The theater command would have the theater material managers, theater movement control agency, and echelons above corps transportation terminal and mode operators. The major functional commands under the Theater Support Command would be Engineers, Medical, Personnel, Finance, and Distribution Management Command. The idea of Distribution Management Commands at both corps and theater levels to synchronize the distribution system warrants further investigation.

Listed below are specific recommendations to implement the single transportation headquarters option. Each recommendation can be modified to address a Distribution Management Command.

1. U.S. Army take the initiative to develop and to

organize a transportation unit that combines terminal and mode operators, and movement control.

2. U.S. Army provide the unit sufficient communications equipment and infrastructure to command and control subordinate units, run new information systems, and communicate with division and echelon above division customer units in an undeveloped theater.

3. Joint Staff J4, USACOM, USTRANSCOM, and U.S. Army work together to develop Joint tactics, techniques, procedures, manpower, and training standards for theater transportation (movement control, terminal and mode operators) as part of the theater distribution system.

4. Joint Staff change doctrine to provide authoritative guidance that movement control is a joint function, not a Service responsibility.

5. Joint Staff and Services continue to develop and refine command and control, and information management systems that link strategic, operational and tactical capabilities.

Summary.

This paper examined concepts for movement control organizations and how they provide support to the Army Component Commander and Joint Force Commander. Echelon above corps transportation units should be combined into one transportation

command to provide unity of effort, to take advantage of new technology and information systems, and to provide one transportation point of contact for the theater. Within a Corps, the Army should consider forming a transportation group or distribution management command. Both concepts will work, if the idea of an additional brigade command within the Corps Support Command is accepted.

Looking out to 2010 and beyond, movement control is the critical function that seamlessly links a successful power projection strategy with an integrated theater transportation system. Moreover, movement control is indispensable to the operational missions of RSOI and theater distribution. The Army should take the initiative, expand its Wartime Executive Agent Responsibilities, and provide an organization that synchronizes all theater transportation functions for the Joint Force Commander.

6417

ENDNOTES

[1] Richard J. Newman, "Deployment Woes Muddling through in Bosnia," U.S. News & World Report, 20 May 1996, 39.

[2] Ibid. The information on the containers was provided by the author, who worked on the USAREUR Crisis Action Team during the Balkan deployment.

[3] Department of Defense, Joint Tactics, Techniques and Procedures for Movement Control, Joint Publication 4-01.3, (Washington, D.C.: U.S. Department of Defense, 21 June 1996), V. Department of the Army, Transportation Operations, FM 55-1, (Washington, D.C.: U.S. Department of the Army, 3 October 1995), 3-1.

[4] "Movement Control Definition," available from <http://www.eustis.army.mil/ocot/movement_control_definition.htm>; Internet; accessed 8 December 1998. This definition is from the new FM 55-10.

[5] Kathryn O'Neill <oneill@lee.army.mil>, "Ref: MC Questions," electronic mail message to Mike Lally <mlally55@aol.com>, 26 January 1999. The Port MCT is an approved 18 man MTOE for active and reserve units. Existing MCTs with a sea or air port mission will start converting in 2000.

[6] Ibid. Area MCTs are an approved 12 man MTOE for active and reserve units, and will start converting in 2000.

[7] Ibid. The Division support teams are an approved six man MTOE for active and National Guard units, and will start converting in 2000.

[8] Ibid. The Movement Regulating Teams are an approved 16 man MTOE for active and reserve units, and will start converting in 2000.

[9] Joint Pub 4-01.3, III-1.

[10] This is a recommendation from the author. LTC Scott Bergeron, "Defense Transportation Control Focus For Power Projection," Strategy Research Paper, U.S. Army War College, Carlisle Barracks, PA, 18 April 1995; and LTC Tom Shea, "Role, Organization, And Functions Of Joint Movement Control In

Reception, Staging, Onward Movement And Integration," Strategy Research Paper, U.S. Army War College, Carlisle Barracks, PA, 15 April 1996 develop this same concept.

[11] Chairman, Joint Chiefs of Staff, National Military Strategy of the United States of America, 1997, in U.S. Army War College Selected Readings, Course 3, Joint Process and Landpower Development, (Carlisle Barracks, PA: U.S. Army War College, 1998), 19.

[12] Secretary of Defense William S. Cohen, Annual Report to the President and the Congress, (Washington, D.C.: U.S. Department of Defense, 1998), 19.

[13] Chairman, Joint Chiefs of Staff, Joint Vision 2010, in U.S. Army War College Selected Readings, Course 3, Joint Process and Landpower Development, (Carlisle Barracks, PA: U.S. Army War College, 1998), 51.

[14] Chairman, Joint Chiefs of Staff, Focused Logistics, (Washington, D.C.: U.S. Joint Chiefs of Staff, n.d.), 1, 13-14.

[15] Ibid., i.

[16] Ibid., 1.

[17] Johnnie E. Wilson, John G. Coburn, and Daniel G. Brown, "Our Revolution In Military Logistics-Supporting the 21st Century Soldier," Army Logistician, January-February 1999, 3.

[18] Ibid.

[19] Ibid., 3-4.

[20] Department of the Army, "Theater Support Command, Information Briefing," 9 December 1998; available from <http://www.cascom.army.mil/multi/New_Concepts/Theater_Support_Command/>; Internet; accessed 1 March 1999.

[21] Focused Logistics, 13.

[22] Department of the Army, Distribution Management Center Tactics, Techniques and Procedures, Draft USCASCOM Phamplet 100-10-XX, February 1999; available from <http://www.cascom.army.mil

/multi/New_Concepts/Distribution_Management_Center/>; Internet; accessed 1 March 1999.

[23] Directorate of Combat Development for Transportation, CASCOM, Fort Lee, VA in coordination with U.S. Army Transportation School is investigating this option.

[24] Kathryn O'Neill, "Reorganizing Movement Control," Army Logistician, July-August 1996, 12. Approved MTOE changes improved the Corps Movement Control Center by adding an S-staff. A second change created a new organization for the echelon above corps movement control battalion. The previous movement control battalion structure was awkward and did not have an approved table of organization and equipment (TOE).

[25] O'Niell, "Ref; MC Questions."

[26] This is a personal observation based on twenty years as a transportation officer. Young officers are encouraged to pursue careers with truck units and multifunctional units such as Forward Support Battalions, Main Support Battalions, and Corps Support Battalions. Therefore, many movement control battalion commanders are in their first movement control unit.

[27] Current authorizations for communications equipment are inadequate. As the Commander, 27th Transportation Battalion (Movement Control), V Corps (1996-1998), I routinely reported this shortfall. Other movement control battalion commanders concur.

[28] Department of Defense, Dictionary of Military and Associated Terms, Joint Publication 1-02 (Washington, D.C.: U.S. Department of Defense, 23 March 1994), 119.

[29] Draft Distribution Management Center, 10.

[30] Ibid., 18-20.

[31] Ibid., 21-23.

[32] Ibid., 43-66.

[33] The capacity part of the distribution system, the truck units that transport things, and the warehouses and distribution centers that receive, unload, breakdown, store, reload, and

issue things are not part of the DMC. The MCC and MMC collect and identify requirements, match resources to requirements, and issue guidance or tasking to other units to accomplish the mission.

[34] Kathryn M. O'Neill, Force Development Division, Directorate of Combat Development for Transportation, CASCOM, Fort Lee, VA, telephone interview by author, 20 January 1999.

[35] Ibid.

[36] A new brigade is one option. Another option is to redefine the mission of the Rear Corps Support Group and give it the Corps Distribution Mission with all required assets.

BIBLIOGRAPHY

Bergeron, Scott M. "Defense Transportation Control: Focus for Power Projection." Strategy Research Project. U.S. Army War College, Carlisle Barracks, PA. 18 April 1995.

Center for Army Lessons Learned. Reception, Staging, Onward Movement & Integration. Newsletter #97-7. Fort Leavenworth, KS: U.S. Army Training and Doctrine Command, February 1997.

Chairman, Joint Chiefs of Staff. Focused Logistics. Washington, D.C.: U.S. Joint Chiefs of Staff, n.d.

Chairman, Joint Chiefs of Staff. Joint Vision 2010. In U.S. Army War College Selected Readings, Course 3, Joint Process and Landpower Development, 48-75. Carlisle Barracks, PA: U.S. Army War College, 1998.

Chairman, Joint Chiefs of Staff. National Military Strategy of the United States of America, 1997. In U.S. Army War College Selected Readings, Course 3, Joint Process and Landpower Development, 16-47. Carlisle Barracks, PA: U.S. Army War College, 1998.

Cohen, William S., Secretary of Defense. Annual Report to the President and the Congress. Washington, D.C.: U.S. Department of Defense, 1998.

McDuffie, John M. "Joint Vision 2010 and Focused Logistics." Army Logistician, January-February 1999, 7.

"Movement Control Definition." Available from <http://www.eustis.army.mil/ocot/movement_control_definition.htm>. Internet. Accessed 8 Dec 1998.

Newman, Richard J. "Deployment Woes Muddling through in Bosnia." U.S. News & World Report, 20 May 1996, 39.

O'Neill, Kathryn M., Force Development Division, Directorate of Combat Development for Transportation, CASCOM, Fort Lee, VA. Telephone interview by author, 20 January 1999.

_____. <oneill@lee.army.mil>. "Ref: MC Questions." Electronic mail message to Mike Lally <mlally55@aol.com>. 26 January 1999.

_____. "Reorganizing Movement Control." Army Logistician, July-August 1996, 12-13.

Shea, Thomas M. "Role, Organization, and Functions of Joint Movement Control in Reception, Staging, Onward Movement and Integration." Strategy Research Project. U.S. Army War College, Carlisle Barracks, PA. 15 April 1996.

U.S. Department of the Army. "Theater Support Command, Information Briefing." 9 December 1998. Available from http://www.cascom.army.mil/multi/New_Concepts/Theater_Support_Command/>. Internet. Accessed 1 March 1999.

U.S. Department of the Army. Distribution Management Center Tactics, Techniques and Procedures. Draft USCASCOM Phamplet 100-10-XX. February 1999. Available from http://www.cascom.army.mil/multi/New_Concepts/Distribution_Management_Center/>. Internet. Accessed 1 March 1999.

U.S. Department of the Army. Movement Control in a Theater of Operations. FM 55-10. Washington, D.C.: U.S. Department of the Army, 8 December 1992.

U.S. Department of the Army. Transportation Operations. FM 55-1. Washington, D.C.: U.S. Department of the Army, 3 October 1995.

U.S. Department of Defense. Dictionary of Military and Associated Terms. Joint Publication 1-02. Washington, D.C.: U.S. Department of Defense, 23 March 1994.

U.S. Department of Defense. Doctrine for Logistics Support of Joint Operations. Joint Publication 4-0. Washington, D.C.: U.S. Department of Defense 27 January 1995.

U.S. Department of Defense. Joint Tactics, Techniques, and Procedures for Movement Control. Joint Publication 4-01.3. Washington, D.C.: U.S. Department of Defense, 21 June 1996.

Wilson, Johnnie E., John G. Coburn, and Daniel G. Brown. "Our Revolution In Military Logistics-Supporting the 21st Century Soldier." Army Logistician, January-February 1999, 3-6.